MATERNITY UNIT

GUIDELINE: Bladder Care Postpartum and Management of Urinary Retention

AUTHOR: Physiotherapist and continence nurse

SCOPE: All health professionals providing postnatal care to women.

PURPOSE: The purpose of this guideline is to assist health professionals in bladder care during the postpartum period, with the aim of preventing urinary retention and its long-term consequences within Maternity Services at Hauora Tairawhiti.

DEFINITIONS: Overt retention: Symptomatic inability to void spontaneously within six hours of birth or removal of IDC. Covert retention: Non-symptomatic increased post void residual volumes after birth or removal of IDC

GUIDELINE:

1. Management, principles and goals
Hormone induced reduction in smooth muscle tone decreases bladder tone (hypotonia) during pregnancy and for a period following birth. These changes may persist for days or longer in some women with the risk of overdistension of the postpartum bladder (Saultz, 1991, see supporting evidence section).

Vigilant surveillance of bladder function and early intervention where problems exist should prevent permanent bladder damage and long-term voiding problems (Rizvi, 2005, see supporting evidence section).

While all women in the immediate postpartum period have the potential to experience urinary problems, several factors increase the risk:

- Prolonged/difficult labour
- Delay in the second stage
- Assisted birth
- Caesarean birth
- Epidural analgesia, particularly with local anaesthetic
- Perineal/vulval trauma
- Over distension of the bladder during/immediately following birth
- Large infant > 4 kg
- English as a second language
- Pain
- Constipation

Aims of Care

- To assess bladder function
- To detect any deviation/s from normal
- To carry out timely preventative measures to avoid complications of urinary dysfunction following birth

2. Management
There are two types of urinary retention that can affect a woman in the postpartum period: overt (see appendix 1) and covert retention (see appendix 2).

3. Assessment

The initial bladder assessment should include:

- A review of the labour and birth history to detect any risk factors
- History of urological problems
- Bladder palpation
- Check to see if the woman has voided after vaginal birth
- IDC in situ – check that it is draining

An initial assessment should provide information on:

- The presence of any urinary problems
- Risk factors that may contribute to urinary problems

4. First 6 hours post-delivery or removal of IDC assessment

Continue to assess bladder functioning 2 hourly. If unable to void or quantity or flow is abnormal at 4 hours, refer to the postpartum overt urinary retention flowchart.

Notes:

- During the night: If there is no history of urological problems, use opportunities when the woman is awake to check bladder. A woman with a history may require 2 hourly checking
- Onset and progression of urinary retention may be gradual and asymptomatic
- It can take up to 8 hours for the bladder to regain sensation following epidural analgesia

Assessment:

- Establish by questioning void or no void
- If yes to void, ask the woman if she is experiencing any discomfort or difficulty when voiding
- Check the frequency with which urine is passing and if urge to void
- Ask volume and quality of flow with each void
- Examine the woman’s abdomen for displacement of the uterus and swelling of the lower abdomen
- Palpate the woman’s bladder

The woman may complain of overt symptoms (symptomatic inability to void spontaneously within six hours of birth or removal of IDC):

- An inability to void
- Increasing lower abdominal pain
- Urgency
- Straining to void
- Involuntary loss of urine
• Voiding frequent small amounts (retention with overflow)

Note: A distended bladder displaces the uterus upward and to the right side. There may also be a painful cystic swelling palpable in the suprapubic region.

If no void at 4 hours either post birth or removal of IDC use supportive measures, such as ambulation, privacy, shower, hands under cold running water, warm flannel over bladder or if necessary appropriate analgesia for pain relief to enhance the likelihood of micturition. Ensure adequate fluid intake and commence Fluid Balance Chart and commence a management plan in MCIS records with tasks attached.

Monitor a further 2 hours: (i.e. until 6 hours post-delivery or sooner if discomfort)

• If void and volume > 200 mL continue with supportive measures and encourage 2-3 hourly voiding
• If no void or volume < 200 mL drain bladder with IDC and refer to overt urinary retention flowchart.

When inserting a catheter:

• Use an indwelling Foley catheter
• Use a strict aseptic technique
• Send CSU to lab
• Document on the Fluid Balance Chart

A woman may have covert urinary retention (non-symptomatic increased post void residual volumes after birth or removal of IDC):

• Ability to void
• But no urge to void
• No obvious symptoms of retention

Refer to postpartum covert urinary retention flowchart

5. Urinary retention

Alert obstetric team.
Diagnosed by symptoms and volume drained following insertion of IDC.

• Residual urinary volume of 150 – 700 mL will require IDC for 24 hours
• Residual urinary volume > 700 mL will require IDC 48 hours
• Residual volumes of > 1500 mL require discussion with the Continence Nurse

A woman who has a residual volume of more than 700 mL is more likely to require repeat catheterisation (Ching-Chung, 2002, see supporting evidence section). After a failed trial of removal of catheter, a discussion with the Continence Nurse is required for further management and a referral to the ward physiotherapist.

Catheterisation rests the over distended bladder allowing it to gain its elastic recoil.
It is advisable to remove urinary catheters early in the day to allow time for careful and regular post catheterisation bladder assessment.

6. Removal of catheter (trial of void) management

   Encourage 2-3 hourly voiding and document voids until normal voiding patterns are established and two measured voids of 200 mL or greater are obtained.

   Reassess the bladder as documented and follow the appropriate flowchart for postpartum overt urinary retention or postpartum covert urinary retention.

   Document all findings on the Fluid Balance Chart and in the woman’s MCIS records.

   Persistent urinary retention and large urinary residuals will require long term resting of the bladder and management by the Obstetric Team in conjunction with Continence Nurse and a clear management plan in the woman’s MCIS records.

   Note: **Bladder scanners are not a reliable measurement of residual volumes in the postpartum woman and are not recommended for use.** The automatic calculation is rendered inaccurate because of the volume of the involuting uterus and its tendency to distort the bladder outline (Pallis & Wilson 2003, see supporting evidence section).

7. Physiotherapy referral for 12 weeks post-delivery - with women’s health outpatient Physiotherapy service - for clients with urge/voiding symptoms on discharge. Record in woman’s MCIS records.
References:

Carley M.E et al., 2002: Factors that are associated with clinically overt postpartum urinary retention after vaginal delivery. American journal of Obstetrics and Gynaecology


WHA Clinical Practice Guideline March 2009


EVALUATION: Audit of MCIS records

Authorised By (HOD Obstetrics)

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Authorised By (Director of Midwifery & Clinical Midwife Manager)

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Appendix 1

POSTPARTUM OVERT URINARY RETENTION
PROCEDURE

DEFINITION: SYMPTOMATIC INABILITY TO VOID WITHIN 6 HOURS OF DELIVERY OR REMOVAL OF IDC

Symptoms:
- Pain
- Urgency
- Hesitancy
- Straining to void
- Slow or intermittent stream
- Sense of incomplete emptying

IDENTIFICATION OF
ONE OR MORE OF THE ABOVE SYMPTOM AND NO VOID > 4 HOURS POST DELIVERY OR R/O IDC

BOX 1

INSTIGATE NON-INVASIVE MEASURES
Analgesia, running water, ambulation, double voiding, provision of privacy, warm shower, ural
ENSURE ADEQUATE FLUID INTAKE

START FLUID BALANCE CHART

WAIT FOR FURTHER 2 HOURS
(OR SOONER IF UNCOMFORTABLE)
UNTIL 6 HOURS POST DELIVER OR R/O IDC

STAGE 1:
IDENTIFICATION & NON-INVASIVE MEASURES

STAGE 2:
ASSESSMENT OF VOLUMES + I/O IDC

STAGE 3:
TRIAL OF VOID

VOLUME of void >200 mL

CONTINUE NON-INVASIVE MEASURES (BOX 1)

VOLUME of void <200 mL

DRAIN BLADDER WITH IDC AND RECORD VOLUME

SEND CSU FOR ANALYSIS

CONTINUE NON-INVASIVE MEASURES

VOLUME from IDC <150 mL
Remove IDC

VOLUME from IDC BETWEEN 150-700 mL

VOLUME from IDC: >700 mL

IDC 24 Hours

IDC 48 Hours

READ NOVOID >4 HOURS POST R/O IDC

REPEAT BOX 1

WAIT FURTHER 2 HOURS (UNTIL 6 HOURS POST R/O IDC)

Spontaneous Void >200 mL

Move to Covert Urinary Retention pathway

Residual Volume Via IDC: >150 mL
Commence 2 hourly timed voiding

No spontaneous void or void <200 mL

Residual Volume Via IDC: <150 mL

Insert IDC and measure volume

Residual Volume Via IDC: BETWEEN 150-700 mL

No further Action

Residual Volume Via IDC: >700 mL

IDC 24 hours

IDC 48 hours

NB. After 2 failed TROC’s refer for medical review

After prescribed time period
DEFINITION: INCREASED POST-VOID RESIDUAL VOLUME AFTER DELIVERY OR REMOVAL OF IDC

IDENTIFIED BY:
- No urge to void
- Ability to void
- No symptoms of retention

AT 4 HOURS POST DELIVERY OR 4 HOURS POST R/O IDC
ASK WOMAN “Have you voided?”

YES
NO

“DID YOU HAVE URGE TO VOID?” (also ask about amount and flow)

YES
NO

NO FURTHER ACTION

COMMENCE ON 2 HOURLY TIMED VOIDING
ENSURE ADEQUATE FLUID INTAKE (2.5-3L/DAY)
START FLUID BALANCE CHART
MEASURE FIRST VOID

VOLUME of void <200 mL
VOLUME of void between 200 mL - 700 mL
VOLUME of void >700 mL

NEXT VOID (after 2 hours)
“did you have the urge to void?”

NO
YES

NO FURTHER ACTION
CONTINUE TIMED VOIDING 24 HOURS

AFTER 24 HOURS “do you have the urge to void?”

YES
NO

NO
YES

MEASURE RESIDUAL VOLUME
Insert IDC

RESIDUAL VOLUME <150 mL
RESIDUAL VOLUME >150 mL

Continue timed voiding
Until bladder sensation returns
Organise follow up 1/52

Leaves IDC for 24 hours

AFTER 24 HOURS REMOVE IDC REPEAT PROCESS